

**Aumictech**

Test & measurement • bought, sold, repaired, calibrated

Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent/Keysight 81480B – Tunable Laser Source

Agilent Keysight 81480B Low SSE Tunable Laser Module 1370 to 1495 nm The Agilent/Keysight 81480B is a low-SSE tunable laser source module covering 1370 to 1495 nm (often described as 1400 nm band) for 8164-series Lightwave Solution mainframes. OEM tunable-laser family sheets list absolute wavelength accuracy plus or minus 10 pm, wavelength resolution 0.1 pm, maximum tuning speed 80 nm/s, and dual low-SSE/high-power outputs with attenuation on the high-power port. 1400 nm-band DWDM/CWDM component characterization, low-SSE filter crosstalk measurements, and swept-wavelength optical testing. The Agilent/Keysight 81480B is a low-SSE tunable laser source module covering 1370 to 1495 nm (often described as 1400 nm band) for 8164-series Lightwave Solution mainframes. OEM tunable-laser family sheets list absolute wavelength accuracy plus or minus 10 pm, wavelength resolution 0.1 pm, maximum tuning speed 80 nm/s, and dual low-SSE/high-power outputs with attenuation on the high-power port. 1400 nm-band DWDM/CWDM component characterization, low-SSE filter crosstalk measurements, and swept-wavelength optical testing.



MODEL

**Agilent / Keysight
81480B**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

81480B

LISTING

<https://aumictechlabs.com/products/81480b-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Keysight 81480B Tunable Laser Source is a modular optical instrument for precision wavelength-swept testing of DWDM passive components and optical systems. Delivering continuous, mode-hop-free tuning across the E- and S-bands with ± 10 pm wavelength accuracy

and 80 nm/s sweep speed, this laser provides both high-power and low-noise outputs optimized for amplifier characterization and dynamic-range-limited measurements. A built-in wavelength meter enables real-time spectral control, while dual Panda-type polarization-maintaining fiber outputs support integration into comprehensive optical test benches.

Technical Specifications

Wavelength Range: 1375 nm to 1495 nm (E- and S-band coverage) **Wavelength Accuracy (Absolute):** ± 10 pm **Tuning Characteristic:** Continuous sweep, mode-hop-free operation **Maximum Tuning Speed:** 80 nm/s **Maximum Output Power:** +5.5 dBm (Output 2) **Optical Outputs:** High-power and low-source-spontaneous-emission (SSE) channels **Built-in Wavelength Meter:** Real-time monitoring and closed-loop control **Fiber Connectors:** Panda-type polarization-maintaining outputs

Key Features

- Mode-hop-free continuous tuning eliminates spectral discontinuities during wavelength sweeps
- Dual-output architecture separates amplifier testing (high power) from precision filter and component characterization (low SSE)
- ± 10 pm absolute wavelength accuracy supports tight tolerance DWDM channel specifications
- Integrated wavelength meter provides feedback control and eliminates need for external wavelength reference instrumentation
- Fast tuning speed (80 nm/s) reduces test time on production lines and in characterization workflows

Typical Applications

- DWDM passive component testing (multiplexers, demultiplexers, filters)
- Optical amplifier gain and noise figure characterization
- Wavelength-dependent loss and dispersion measurement in optical subsystems
- R&D development of narrow-linewidth optical filters and wavelength-selective devices

Compatibility & Integration

The 81480B operates as a plug-in module within Keysight's modular mainframe architecture (e.g., 8164B Lightwave Solution Mainframe). Dual Panda-type fiber outputs enable direct integration with external test platforms and optical subsystems requiring polarization-maintaining signal paths.

Features & description

From manufacturer datasheet

Low SSE Output 1 and high power Output 2

Absolute wavelength accuracy plus or minus 10 pm Mode-hop-free tuning over full range class family
Up to 80 nm/s tuning speed

Built-in attenuator path on high-power output

Technical Specifications Model: 81480B Wavelength Range: 1370 nm to 1495 nm Wavelength Resolution: 0.1 pm Wavelength Resolution Frequency At 1550 nm Class: 12.5 MHz class family sheet Absolute Wavelength Accuracy: plus or minus 10 pm Relative Wavelength Accuracy: plus or minus 5 pm typical plus or minus 2 pm Wavelength Repeatability: plus or minus 0.8 pm typical plus or minus 0.5 pm Maximum Tuning Speed: 80 nm/s Mode Hop Free Tuning: full wavelength range class family Dynamic Absolute Accuracy At 5 nm/s Typical: plus or minus 0.4 pm Dynamic Absolute Accuracy At 40 nm/s Typical: plus or minus 1.0 pm Dynamic Absolute Accuracy At 80 nm/s Typical: plus or minus 2.5 pm

High Power Output Max Class: +5.5 dBm Output 2 class reseller/OEM summary

Power Linearity: plus or minus 0.1 dB static class Power Linearity Attenuation Mode: plus or minus 0.3 dB Power Stability 1 Hour: plus or minus 0.01 dB Power Stability 24 Hour Typical: plus or minus 0.03 dB SMSR Class: greater than 40 dB/nm class family sheet Mainframe Compatibility: 8164A/B Lightwave Solution class Instrument Type: low SSE tunable laser module Attenuation On High Power Port: yes class dual-output family Form Factor: plug-in TLS module Notes From Agilent tunable laser family specification sheets including 81480B row (wavelength accuracy, resolution, dynamic tuning, power stability). Confirm exact power-vs-wavelength table on the installed unit option.

81480B Characteristics / Specifications

PARAMETER	VALUE
Model	81480B
Wavelength Range	1370 nm to 1495 nm
Wavelength Resolution	0.1 pm
Wavelength Resolution Frequency At 1550 nm Class	12.5 MHz class family sheet
Absolute Wavelength Accuracy	plus or minus 10 pm
Relative Wavelength Accuracy	plus or minus 5 pm typical plus or minus 2 pm
Wavelength Repeatability	plus or minus 0.8 pm typical plus or minus 0.5 pm
Maximum Tuning Speed	80 nm/s
Mode Hop Free Tuning	full wavelength range class family
Dynamic Absolute Accuracy At 5 nm/s Typical	plus or minus 0.4 pm
Dynamic Absolute Accuracy At 40 nm/s Typical	plus or minus 1.0 pm
Dynamic Absolute Accuracy At 80 nm/s Typical	plus or minus 2.5 pm
High Power Output Max Class	+5.5 dBm Output 2 class reseller/OEM summary
Power Linearity	plus or minus 0.1 dB static class
Power Linearity Attenuation Mode	plus or minus 0.3 dB
Power Stability 1 Hour	plus or minus 0.01 dB
Power Stability 24 Hour Typical	plus or minus 0.03 dB
SMSR Class	greater than 40 dB/nm class family sheet
Mainframe Compatibility	8164A/B Lightwave Solution class
Instrument Type	low SSE tunable laser module
Attenuation On High Power Port	yes class dual-output family
Form Factor	plug-in TLS module
Attenuation	Mode: plus or minus 0.3 dB

PARAMETER	VALUE
Power stability	1 Hour: plus or minus 0.01 dB

81480B Specifications

PARAMETER	VALUE
Applications	1400 nm-band DWDM/CWDM component characterization, low-SSE filter crosstalk measurements, and swept-wavelength optical testing.
Key Features	Low SSE Output 1 and high power Output 2
Technical Specifications	Model: 81480B

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
Specifications	
PARAMETER	VALUE
Model	81480B
Wavelength Range	1370 nm to 1495 nm
Wavelength Resolution	0.1 pm
Wavelength Resolution Frequency At 1550 nm Class	12.5 MHz class family sheet
Absolute Wavelength Accuracy	plus or minus 10 pm
Relative Wavelength Accuracy	plus or minus 5 pm typical plus or minus 2 pm
Wavelength Repeatability	plus or minus 0.8 pm typical plus or minus 0.5 pm
Maximum Tuning Speed	80 nm/s
Mode Hop Free Tuning	full wavelength range class family
Dynamic Absolute Accuracy At 5 nm/s Typical	plus or minus 0.4 pm
Dynamic Absolute Accuracy At 40 nm/s Typical	plus or minus 1.0 pm
Dynamic Absolute Accuracy At 80 nm/s Typical	plus or minus 2.5 pm
High Power Output Max Class	+5.5 dBm Output 2 class reseller/OEM summary
Power Linearity	plus or minus 0.1 dB static class
Power Linearity Attenuation Mode	plus or minus 0.3 dB
Power Stability 1 Hour	plus or minus 0.01 dB
Power Stability 24 Hour Typical	plus or minus 0.03 dB
SMSR Class	greater than 40 dB/nm class family sheet
Mainframe Compatibility	8164A/B Lightwave Solution class
Instrument Type	low SSE tunable laser module
Attenuation On High Power Port	yes class dual-output family
Form Factor	plug-in TLS module

Notes

From Agilent tunable laser family specification sheets including 81480B row (wavelength accuracy, resolution, dynamic tuning, power stability). Confirm exact power-vs-wavelength table on the installed unit option.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

788 S 500 E, Pleasant Grove, UT 84062
sales@aumictech.com · +1 (484) 841-9341
<https://aumictechlabs.com>

NIST-traceable calibration · SAM registered ·
30-day returns
NAICS 423690 · 811210 · 541380
Generated August 14, 2026

Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.